

## YOUR CONNECTED PLATFORM FOR ACCELERATING SCIENCE



**Elemental Machines** makes sensors and software to optimize complex operations.

Critical data is encoded everywhere, but much of this data remains hidden from those who need it most. Unseen, unmeasured factors drive inefficiencies worth billions of dollars to the dominant industries in our economy, from yield loss in pharmaceutical production to machine down-time in advanced manufacturing to the epidemic of experimental irreproducibility in life sciences R&D.

Rich, well-annotated datasets from connected sensors can eliminate this waste. Elemental Machines is on a mission to create products that make it easy to gather and transform this data into actionable insights to transform these scientific processes. Companies can only improve what they can measure, but extracting and understanding information from complex operations is challenging. The Elemental Machines Platform is easy to deploy, gathers reliable, comprehensive data, integrates with your existing infrastructure.







- · Foundation of the Elemental Machines Connected Platform
- Small, add-on, internet of things (IoT) devices for data collection
- · Easy setup. Data streamed to cloud within minutes via Bluetooth or Wifi
- Seamlessly capture data and metadata from all laboratory assets and environments involved in any scientific study, such as:
  - Incubators
  - Balances
  - Freezers
  - Centrifuges

  - · Blood glucose analyzers
- pH meters
- Refrigerators
- HPLCs
- Ambient environments



- · Aggregates data from Precision IoT Sensors
- · Benefits of cloud storage are:
  - 24/7 alerting via email/text regarding equipment status
  - · Elimination of data silos and instead creation data lakes.
  - · Secure multi-user, role-based access
  - · Virtually unlimited storage and global access

## **POWERFUL ANALYTICS**

- Possible through data lakes and access to reliable, comprehensive data
- · Powerful algorithms to uncover:
  - hidden trends and variability that may confound experimental results, impede scientific discovery and process scalability
  - · Equipment utilization that highlight over- and under-utilized equipment in your facility. This helps your organization reallocate assets for optimal use.
  - · Imminent equipment failure through predictive analytics. Prevent operational interruptions by proactively scheduling maintenance before equipment failure occurs.



- Easy integration with Electronic laboratory notebooks (ELNs) and/or Laboratory Information Management Systems (LIMS)
- Integration also possible with variety of databases
- Alternatively, data viewable on cloud-based Elemental Machines Dashboard anytime, anywhere

## **ACTIONABLE INSIGHTS**

 Accelerate scientific discovery, increase reproducibility, and improve scalability.





